



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,033	04/14/2006	Charles M. Milliren	36211US1	9700
116 7590 09/17/2008 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER COONEY, JOHN M				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
09/17/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,033

Applicant(s)

MILLIREN

Examiner

John Cooney

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-67 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 35-67 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date 20060414
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 66-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recited impact properties and indicated recoverability and strength retention values as recited in applicants' claims are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Support for the recitations of these claims is not seen to be adequately provided for by applicants' disclosure at paragraphs [0007],[0018], or from the Tables, Examples, or Figures of applicants' originally filed supporting disclosure. This includes also the use of the term "about" in setting forth these values.

This is a new matter rejection.

Claims 35-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. The various ranges of values set forth by applicants' claims {most notably "at least 10 part", in claim 35; "0.01-", in claim 35; "60-" in claim 37; "about 1-3 parts" in claim 39; "about 1-6 parts" in claim 40; "-70" in claim 44; "0-36 parts" in claim 44; "0-2.5" in claim 45; "60-70 parts" & "30-40 parts" in claim 51; and "8-10 parts" in claim 52, as well as, the corresponding process claims} are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Support for the recitations of these claims is not seen to be adequately provided for by applicants' originally filed supporting disclosure. This includes also the use of the term "about" in setting forth these values.

This is a new matter rejection.

It is additionally noted that support needs to be shown in the disclosure of the parent applications for this application for the subject matter of the claims to be afforded the benefits of the earlier filing dates of these indicated parent applications. Additionally, if support is not evident in the parent applications of this application then the filing status of this application should be changed from "Continuation" status to "Continuation-in-Part" with loss of the filing date for added subject matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 66-67 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "negligible" in claim 66 is a relative term which renders the claim indefinite. The term "negligible" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicants' do not adequately define "negligible" so as to render the basis of the recitations of the claim determinable, and, accordingly, the claim is confusing as to intent.

Claims 67 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The conditions for determination of the claimed range of breakthrough acceleration values are not provided in the recitations of the claims such that the metes and bounds of the claims can be definitively determined. Accordingly, the claims are confusing as to intent. Claim 67 recites the foam of claim 66, and employment of the term "said" does not serve the effect of implying all of the conditions recited in claim 66 that are not mentioned in claim 67.

Claims 35-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claims recite numerous ranges of parts by weight and weight percent values but do not recite what these ranges of values are based upon. Accordingly, the claims are confusing as to intent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apichatachutapan et al.(2004/0266897).

Apichatachutapan et al. discloses preparations of viscoelastic polyurethane foam preparations wherein isocyanates having isocyanate content values as claimed by applicants are combined and reacted with polyol compositions including polyether polyols based on glycerols, amines, alkanolamines, and other initiators prepared from propylene oxide to the degrees required by the claims, and wherein the compositions are combined at an NCO index as defined by the claims and in the presence of water, various catalyst which are encompassing of those claimed, and additives (see abstract, paragraphs [0015]-[0040], as well as, the entire document). Apichatachutapan et al.'s

preparations exhibit impact and strength properties which are not seen to differentiate from those of applicants' claims based on the materials and make-ups of the preparations claimed.

Apichatachutapan et al. differs from applicants' claims in that it does not specifically require that amine based polyether polyols be employed in their preparations. However, Apichatachutapan et al. does recite that amine initiators, and, particularly, the specific amines of applicants claims, can be used in the practice of their invention for the purpose of providing adequate isocyanate reactive components(see paragraph [0024]). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the amine initiators disclosed by Apichatachutapan et al. in the preparations of Apichatachutapan et al. in blended combinations for the purpose of providing their isocyanate reactive effect in the preparations of Apichatachutapan et al. in order to arrive at the products and/or processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Additionally, the reference provides disclosure of glycerine-based polyether polyols and NCO indexes as claimed and distinction based on these elements is not seen. Further, patentable distinction is not seen based on the inclusion of black paste of applicants' claims, because inclusion of pigmented fillers for coloration and reinforcement is well known to practitioners in the art, and their inclusion within the preparations of Apichatachutapan et al. for such purposes would have been obvious to one having ordinary skill in the art.

Also, regarding variations in amounts of respective reactant and additive components, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of the same properties. *Titanium Metals v Banner* 227 USPQ 773. (see also MPEP 2144.05 I) Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Claims 35-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutter et al.(5,420,170).

Lutter et al. discloses preparations of polyurethane foam preparations wherein isocyanates having isocyanate content values as claimed by applicants are combined and reacted with polyol compositions including polyether polyols based on glycerols, amines, alkanolamines, and other initiators prepared from propylene oxide to the degrees required by the claims, and wherein the compositions are combined at an NCO index as defined by the claims and in the presence of water, various catalyst which are encompassing of those claimed, and additives (see abstract, column 3 line 59-column 13 line 42, as well as, the entire document). Lutter et al.'s preparations exhibit impact

and strength properties which are not seen to differentiate from those of applicants' claims based on the materials and make-ups of the preparations claimed.

Lutter et al. differs from applicants' claims in that it does not specifically require that amine based polyether polyols be employed in their preparations. However, Lutter et al. does recite that amine initiators can be used in the practice of their invention for the purpose of providing adequate isocyanate reactive components(see column 7 line 53 – column 8 line 19, as well as, the entire document, again). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the amine initiators disclosed by Lutter et al. in the preparations of Lutter et al. in blended combinations for the purpose of providing their isocyanate reactive effect in the preparations of Lutter et al. in order to arrive at the products and/or processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Additionally, the reference provides disclosure of, and even a preference for, glycerine-based polyether polyols and NCO indexes as claimed and distinction based on these elements is not seen. Further, patentable distinction is not seen based on the inclusion of black paste of applicants' claims, because inclusion of pigmented fillers for coloration and reinforcement is well known to practitioners in the art, and their inclusion within the preparations of Lutter et al. for such purposes would have been obvious to one having ordinary skill in the art.

Also, regarding variations in amounts of respective reactant and additive components, it has long been held that where the general conditions of the claims are

disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of the same properties. *Titanium Metals v Banner* 227 USPQ 773. **(see also MPEP 2144.05 I)** Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Claims 35-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falke et al.(6,316,514).

Falke et al. discloses preparations of polyurethane foam preparations wherein isocyanates having isocyanate content values as claimed by applicants are combined and reacted with polyol compositions including polyether polyols based on glycerols, amines, alkanolamines, and other initiators prepared from propylene oxide to the degrees required by the claims, and wherein the compositions are combined at an NCO index as defined by the claims and in the presence of water, various catalyst which are encompassing of those claimed, and additives (see abstract, column 2 line 25–column 10 line 51, as well as, the entire document). Falke al.'s preparations exhibit impact and

strength properties which are not seen to differentiate from those of applicants' claims based on the materials and make-ups of the preparations claimed.

Falke et al. differs from applicants' claims in that it does not specifically require that amine based polyether polyols be employed in their preparations. However, Falke et al. does recite that amine initiators, and, particularly, the specific amines of applicants' claims, can be used in the practice of their invention for the purpose of providing adequate isocyanate reactive components (see column 6 lines 27-48, as well as, the entire document, again). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the amine initiators disclosed by Falke et al. in the preparations of Falke et al. in blended combinations for the purpose of providing their isocyanate reactive effect in the preparations of Falke et al. in order to arrive at the products and/or processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Additionally, the reference provides disclosure of, and even a preference for, glycerine-based polyether polyols and NCO indexes as claimed and distinction based on these elements is not seen. Further, patentable distinction is not seen based on the inclusion of black paste of applicants' claims, because inclusion of pigmented fillers for coloration and reinforcement is well known to practitioners in the art, and their inclusion within the preparations of Falke et al. for such purposes would have been obvious to one having ordinary skill in the art.

Also, regarding variations in amounts of respective reactant and additive components, it has long been held that where the general conditions of the claims are

disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of the same properties. *Titanium Metals v Banner* 227 USPQ 773. (see also MPEP 2144.05 I)

Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 35-67 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 7,078,443. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 7,078,443 discloses preparations of viscoelastic polyurethane foam preparations wherein isocyanates having isocyanate content values as claimed by applicants are combined and reacted with polyol compositions including polyether polyols based on glycerols, amines, alkanolamines, and other initiators prepared from propylene oxide to the degrees required by the claims, and wherein the compositions are combined at an NCO index as defined by the claims and in the presence of water, various catalyst which are encompassing of those claimed, and black paste and good strength and impact properties, wherein modification to remedy differences and variations in specific ranges of amounts of particular reactants and additives within the teaching of the claims of 7,078,443 for purposes of achieving acceptable product formation would have been obvious to one having ordinary skill in the art with the expectation of success in the absence of a showing of new or unexpected results attributable to specific differences in the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/

Primary Examiner, Art Unit 1796